

RECEIVED

FEB 25 2003

24

TECH CENTER 1600/2500

1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/529,239D

DATE: 01/28/2003

TIME: 08:42:38

Input Set : A:\09529239ThirdSubSeqList.txt
 Output Set: N:\CRF4\01282003\I529239D.raw

```

1 <110> APPLICANT: Doutriaux, Marie-Pascale
2           Betzner, Andreas
3           Freyssinet, Georges
4           Perez, Pascal
6 <120> TITLE OF INVENTION: METHOD FOR OBTAINING PLANT VARIETIES
9 <130> FILE REFERENCE: A33153-PCT-USA 072667.0128
11 <140> CURRENT APPLICATION NUMBER: 09/529,239D
12 <141> CURRENT FILING DATE: 2000-10-27
14 <150> PRIOR APPLICATION NUMBER: PCT/EP98/06977
15 <151> PRIOR FILING DATE: 1998-10-09
17 <160> NUMBER OF SEQ ID NOS: 100
19 <170> SOFTWARE: FastSEQ for Windows Version 4.0
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 23
23 <212> TYPE: DNA
24 <213> ORGANISM: Artificial Sequence
26 <220> FEATURE:
27 <221> NAME/KEY: modified_base
28 <222> LOCATION: (11)...(11)
29 <223> OTHER INFORMATION: I
31 <221> NAME/KEY: modified_base
32 <222> LOCATION: (14)...(14)
33 <223> OTHER INFORMATION: I
W--> 35 <221> modified_base
36 <222> LOCATION: (17)...(17)
37 <223> OTHER INFORMATION: I
39 <223> OTHER INFORMATION: Degenerate oligonucleotides UPMU used to isolate
40           AtMSH3 and AtMSH6.
42 <300> PUBLICATION INFORMATION:
43 <301> AUTHORS: Reenan and Kolodner
44 <302> TITLE: Genetics
45 <303> JOURNAL: 132
46 <306> PAGES: 963-973
47 <307> DATE: 1992
W--> 49 <400> 1
W--> 50 ctggatccac ngnncnaay atg
52 <210> SEQ ID NO: 2
53 <211> LENGTH: 23
54 <212> TYPE: DNA
55 <213> ORGANISM: Artificial Sequence
57 <220> FEATURE:
58 <223> OTHER INFORMATION: Degenerate oligonucleotides DOMU used to isolate
59           AtMSH3 and AtMSH6.

```

ENTERED

23

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/529,239D

DATE: 01/28/2003

TIME: 08:42:38

Input Set : A:\09529239ThirdSubSeqList.txt
Output Set: N:\CRF4\01282003\I529239D.raw

W--> 61 <221> NAME/KEY: modified_base
62 <222> LOCATION: (15)...(15)
63 <223> OTHER INFORMATION: I
W--> 65 <221> modified_base
66 <222> LOCATION: (18)...(18)
67 <223> OTHER INFORMATION: I
69 <300> PUBLICATION INFORMATION:
70 <301> AUTHORS: Reenan and Kolodner
71 <302> TITLE: Genetics
72 <303> JOURNAL: 132
73 <306> PAGES: 963-973
74 <307> DATE: 1992
W--> 76 <400> 2
W--> 77 ctggatccrt artgngtnrc raa 23
79 <210> SEQ ID NO: 3
80 <211> LENGTH: 24
81 <212> TYPE: DNA
82 <213> ORGANISM: Artificial Sequence
84 <220> FEATURE:
85 <223> OTHER INFORMATION: MSH3 specific primer 636 for PCR using cDNA of
86 Arabidopsis thaliana ecotype Columbia.
89 <400> SEQUENCE: 3
90 tgcttagtgcc tcttgcaagc tcatt 24
92 <210> SEQ ID NO: 4
93 <211> LENGTH: 27
94 <212> TYPE: DNA
95 <213> ORGANISM: Artificial Sequence
97 <220> FEATURE:
98 <223> OTHER INFORMATION: Primer AP1 for PCR using cDNA of Arabidopsis
99 thaliana ecotype Columbia containing adapter
100 sequences ligated to both its ends.
102 <400> SEQUENCE: 4
103 ccatcctaatac acgactcaact ataggc 27
105 <210> SEQ ID NO: 5
106 <211> LENGTH: 23
107 <212> TYPE: DNA
108 <213> ORGANISM: Artificial Sequence
110 <220> FEATURE:
111 <223> OTHER INFORMATION: Primer AP2 for PCR using cDNA of Arabidopsis
112 thaliana ecotype Columbia containing adapter
113 sequences ligated to both its ends.
115 <400> SEQUENCE: 5
116 actcaactata gggctcgagc ggc 23
118 <210> SEQ ID NO: 6
119 <211> LENGTH: 30
120 <212> TYPE: DNA
121 <213> ORGANISM: Artificial Sequence
123 <220> FEATURE:
124 <223> OTHER INFORMATION: MSH3 specific primer S525 for PCR using cDNA of

RAW SEQUENCE LISTING DATE: 01/28/2003
PATENT APPLICATION: US/09/529,239D TIME: 08:42:38

Input Set : A:\09529239ThirdSubSeqList.txt
Output Set: N:\CRF4\01282003\I529239D.raw

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/529,239D

DATE: 01/28/2003
TIME: 08:42:38

Input Set : A:\09529239ThirdSubSeqList.txt
Output Set: N:\CRF4\01282003\I529239D.raw

```

191 <211> LENGTH: 1250
192 <212> TYPE: DNA
193 <213> ORGANISM: Arabidopsis thaliana ecotype Columbia
195 <220> FEATURE:
196 <221> NAME/KEY: misc_feature
197 <222> LOCATION: (0)...(0)
198 <223> OTHER INFORMATION: Clone 52
200 <400> SEQUENCE: 12
201 cccgggatgg gcaagcaaaa gcagcagacg atttctcggt tcttcgctcc caaacccaaa 60
202 tccccgactc acgaaccgaa tccggtagcc gaatcatcaa caccgccacc gaagatatcc 120
203 gccactgtat ccttctctcc ttccaagcgt aagcttctct ccgaccaccc cgccgcccgcg 180
204 tcacccaaaa agcctaaact ttctccctcac actcaaaacc cagtacccga tcccaattta 240
205 caccaaagat ttctccagag atttctggaa ccctcgccgg aggaatatgt tcccgaaacg 300
206 tcatacatcga ggaatacac accattggaa cagcaagtgg tggagctaaa gagcaagtac 360
207 ccagatgtgg tttttaggtt ggaagtttgt tacaggata gattcttcgg agaagacgcg 420
208 gagatcgcag cacgcgtgtt gggattttac gctcatatgg atcacaattt catgacggcg 480
209 agtgtgccaa catttcgatt gaatttccat gtgagaagac tggtaatgc aggatacaag 540
210 attggtagtga tgaagcagac tgaaactgca gccattaagt cccatggtgc aaaccggacc 600
211 ggccctttt tccggggact gtccgggttg tataccaaag ccacgcttga agcggctgag 660
212 gatataagtg gtgggtgtgg tggtaagaa ggttttgtt cacagagtaa ttcttggtt 720
213 tgtgttgtgg atgagagagt taagtcggag acattaggct gtggatttga aatgagttt 780
214 gatgttagag tcgggtgtgt tggcggttga atttcgacag gtgaagttgt ttatgaagag 840
215 ttcaatgata atttcatgag aagtggatta gaggctgtga tttttagctt gtcaccagct 900
216 gagctgttgc ttggccagcc tcttcacaa caaactgaga agtttttgtt ggcacatgct 960
217 ggacctacct caaacgttcg agtggAACGT gcctcactgg attgtttcag caatggtaat 1020
218 gcagtagatg aggttatttc attatgtgaa aaaatcagcg caggtaactt agaagatgt 1080
219 aaagaaatga agctggaggc tgctaaaaaa ggaatgtctt gcttgacagt tcatacaatt 1140
220 atgaacatgc cacatctgac tgtcaagcc ctgccttaa cgtttgcca tctcaaacag 1200
221 ttggatttg aaaggatcct ttaccaaggg gcctcatttc gctctttgtc 1250
223 <210> SEQ ID NO: 13
224 <211> LENGTH: 34
225 <212> TYPE: DNA
226 <213> ORGANISM: Artificial Sequence
228 <220> FEATURE:
229 <223> OTHER INFORMATION: MSH3 specific primer 2S5 for PCR using cDNA of
230 Arabidopsis thaliana ecotype Columbia.
232 <400> SEQUENCE: 13
233 atcccggtc aaaatgaaca agttggttt agtc 34
235 <210> SEQ ID NO: 14
236 <211> LENGTH: 27
237 <212> TYPE: DNA
238 <213> ORGANISM: Artificial Sequence
240 <220> FEATURE:
241 <223> OTHER INFORMATION: MSH3 specific primer S52 for PCR using cDNA of
242 Arabidopsis thaliana ecotype Columbia.
244 <400> SEQUENCE: 14
245 gccacatctg actgttcaag ccctcgc 27
247 <210> SEQ ID NO: 15
248 <211> LENGTH: 2110

```

RAW SEQUENCE LISTING DATE: 01/28/2003
 PATENT APPLICATION: US/09/529,239D TIME: 08:42:38

Input Set : A:\09529239ThirdSubSeqList.txt
 Output Set: N:\CRF4\01282003\I529239D.raw

249 <212> TYPE: DNA
 250 <213> ORGANISM: Arabidopsis thaliana ecotype Columbia
 252 <220> FEATURE:
 253 <221> NAME/KEY: misc_feature
 254 <222> LOCATION: (0)...(0)
 255 <223> OTHER INFORMATION: Clone 13
 257 <400> SEQUENCE: 15
 258 gccacatctg actgttcaag ccctgcgcct aacgtttgc catctcaaac agttggatt 60
 259 tgaaggatc ctttaccaag gggcctcatt tcgcttttgc tcaagtaaca cagatgac 120
 260 tcttcagcc aataactctgc aacagtggaa ggttgtgaaa aataattcag atggatcgaa 180
 261 atctggctcc ttattccata atatgaatca cacacttaca gtatatggtt ccaggcttc 240
 262 tagacactgg gtgactcatt ctctatgcga tagaaatttg atatctgctc ggcttgatgc 300
 263 tgtttctgag atttctgctt gcatggatc tcataaggatc tcccagctca gcagttagtt 360
 264 ggttgaagaa ggttctgaga gagcaattgt atcacctgag ttttatctcg tgcttcctc 420
 265 agtcttgaca gctatgtcta gatcatctga tattcaacgt ggaataacaa gaatcttca 480
 266 tcggactgct aaagccacag agttcattgc agttatggaa gctattttac ttgcgggaa 540
 267 gcaaattcag cggcttgca taaagcaaga ctctgaatg aggatgtgc aatctgcaac 600
 268 tgtgcgatct actcttttgc gaaaattgtat ttctgttatt tcataccctcg ttgtgggtga 660
 269 caatgccgaa aaacttctct ctgccttaaa taaggaagcg gctgttcgag gtgacttgct 720
 270 cgacatacta atcacttcca gcgaccaatt tcctgagctt gctgaagctc gccaaggcgt 780
 271 ttttagtcatc agggaaaagc tggattcctc gatacgatc ttcgcaga agctcgat 840
 272 tcgaaatttg gaatttcttc aagtgtcgaa gatcacat ttgatagagc tgcccggtga 900
 273 ttccaaggatc cctatgaatt gggtaaaatg aaatagcacc aagaagacta ttgcataatca 960
 274 tcccccagaa atagtagctg gcttggatgc gctagctca gcaactgaac atcttgcatt 1020
 275 tgtgaaccga gttcgtggg atagtttctt caagagttt agtagatact acacagattt 1080
 276 taaggctgcc gttcaagctc ttgctgcact ggactgtttt cactccctt caactctatc 1140
 277 tagaaacaag aactatgtcc gtcccggatg ttgtggatgac ttgtggatc ttgagataaa 1200
 278 catabactt ggtcgatc ctgtactggaa gactatatta caagataact tcgtccaaa 1260
 279 tgacacaatt ttgcattgc aaggggaaata ttgcattttt atcaccggac ctaacatggg 1320
 280 aggaaagagc tgctataatcc gtcaagttgc ttaatttcc ataatggctc aggttggttc 1380
 281 ctttgcattca gcgatcattgc ccaagctgc cgtgcttgc ggtgtttca ctggatggg 1440
 282 tgcttcagac agtatccagc atggcagaag tacatttcta gaagaattaa gtgaagcgatc 1500
 283 acacataatc agaacctgtt ctttcgttc gtttgtata tttagatgagc ttggaaagagg 1560
 284 cactagcaca cacgacgtg tagccattgc ctatgcacca ttacagcattc tccttagcaga 1620
 285 aaagagatgt ttggttttt ttgtcaatgc ttaccctgaa atagctgaga tcagtaacgg 1680
 286 attcccgatg tctgttggaa cataccatgt ctcgtatctg acattgcaga aggataaagg 1740
 287 cagttatgtat catgtatgt tgacctacat atataagctt gtgcgtggtc ttgcagcag 1800
 288 gagctttgtt ttaaggatgc ctcagatcttgc ccagatacc ccatcatgtt tacgtcgagc 1860
 289 cattcaatg gctgcaaat tggaaatgt ggtacgtgc agagagagaa atacacgcatt 1920
 290 gggagaacca gaaggacatg aagaaccggag aggccggaa gaatcttattt cggctctagg 1980
 291 tgacttggatgc gcaatgttgc aatttgcattt ctctgaatgg gacccttggaa aagcattcga 2040
 292 gttttaaatgcatgtttggaa agattgtgg caaaatcaga ctaaaatccaa cttgttccatt 2100
 293 ttgacccggg 2110
 295 <210> SEQ ID NO: 16
 296 <211> LENGTH: 29
 297 <212> TYPE: DNA
 298 <213> ORGANISM: Artificial Sequence
 300 <220> FEATURE:
 301 <223> OTHER INFORMATION: MSH3 specific primer S51 for PCR using cDNA of

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/529,239D DATE: 01/28/2003
TIME: 08:42:39

Input Set : A:\09529239ThirdSubSeqList.txt
Output Set: N:\CRF4\01282003\I529239D.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 11,14,17
Seq#:2; N Pos. 15,18